

**Exhibit A - *Tulip Trading Ltd. v.
Bitcoin Ass'n for BSV & Others***



Neutral Citation Number: [2022] EWHC 667 (Ch)

Case No: BL-2021-000313

IN THE HIGH COURT OF JUSTICE
BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES
BUSINESS LIST (ChD)

Rolls Building, Royal Courts of Justice
Fetter Lane, London, EC4A 1NL

Date: 25/03/2022

Before :

MRS JUSTICE FALK

Between :

TULIP TRADING LIMITED
(a Seychelles company)

Respondent/
Claimant

- and -

- (2) WLADIMIR VAN DER LAAN**
- (3) JONAS SCHNELLI**
- (4) PIETER WUILLE**
- (5) MARCO FALKE**
- (6) SAMUEL DOBSON**
- (7) MICHAEL FORD**
- (8) CORY FIELDS**
- (9) GEORGE DOMBROWSKI**
- (10) MATTHEW CORALLO**
- (11) PETER TODD**
- (12) GREGORY MAXWELL**
- (15) AMAURY SÉCHET**
- (16) JASON COX**

Applicants/
Defendants

- (1) BITCOIN ASSOCIATION FOR BSV**
(a Swiss verein)
- (13) ERIC LOMBROZO**
- (14) ROGER VER**

Defendants

John Wardell QC, Bobby Friedman and Sri Carmichael (instructed by **ONTIER LLP**) for the **Claimant**

James Ramsden QC (instructed by **Bird & Bird LLP**) for the **Second to Twelfth Defendants**

Matthew Thorne (instructed by **O'Melveny & Myers LLP**) for the **Fifteenth and Sixteenth Defendants**

Hearing dates: 4, 7 and 8 March 2022

APPROVED JUDGMENT

I direct that no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

Covid-19 Protocol: This judgment was handed down by the judge remotely by circulation to the parties' representatives by email and release to BAILII. The date and time for hand-down is deemed to be 10 am Friday 25 March 2022.

Mrs Justice Falk:

INTRODUCTION

1. This is my decision on applications by the Second to Twelfth, and Fifteenth and Sixteenth, Defendants challenging the jurisdiction of the court.
2. The Claimant, Tulip Trading Limited (“TTL”), is a company incorporated in the Seychelles. Its CEO is Dr Craig Wright. Dr Wright is an Australian citizen who has been resident in England since 2015.
3. The claim relates to a very substantial amount of digital currency assets that TTL claims to own but is currently unable to control or use, following what it says was a hack of computers located at Dr Wright’s home office in Surrey. TTL says that the result of the hack was to remove from those systems the “private keys” which would allow dealings in the assets, and information that would allow access to those keys.
4. In outline, TTL’s case is that the Defendants are the core developers and/or otherwise control the software in respect of four relevant digital asset networks (the “Networks”), as follows:
 - a) The Bitcoin Satoshi Vision network (the “BSV Network”) – the First Defendant (the “Bitcoin Association”).
 - b) The Bitcoin Core network (the “BTC Network”) – the Second to Thirteenth Defendants (the “BTC Developers”).
 - c) The Bitcoin Cash network (the “BCH Network”) – the Fourteenth Defendant.
 - d) The Bitcoin Cash ABC network (the “BCH ABC Network”) – the Fifteenth and Sixteenth Defendants.
5. None of the Defendants are in the jurisdiction.
6. TTL claims that the Defendants owe it fiduciary and/or tortious duties which have the effect that they should assist it in regaining control and use of its assets. Specifically, TTL seeks a declaration that it owns the relevant assets and orders requiring the Defendants to take steps to ensure that TTL has access to and control of them (or at least that they take all reasonable steps to ensure that it does and to ensure that effect is not given to the fraud), or for equitable compensation or damages. TTL’s case is that it would not be technically difficult to write and implement a software “patch” enabling TTL to regain control of the assets.
7. TTL’s amended claim form, particulars of claim and application to serve out were filed in April 2021. The application to serve out was supported by witness evidence from, in particular, Dr Wright and from Oliver Cain, a partner at TTL’s solicitor ONTIER. By an order dated 7 May 2021 Deputy Master Nurse granted permission to serve all parties out of the jurisdiction, and in the case of certain Defendants by email.

8. All Defendants have now been served. The First Defendant has accepted the court's jurisdiction. The Thirteenth Defendant has not taken any step in the proceedings. The Fourteenth Defendant was served only in late December. He has indicated that he intends to challenge jurisdiction, and has sought an extension of time in which to do so. All the other Defendants have challenged jurisdiction. References in this decision to the Defendants, or to the BTC Developers in the case of the Thirteenth Defendant, exclude Defendants who have not, or not yet, challenged jurisdiction, unless the context otherwise requires.
9. The hearing was listed for three days, together with two days of pre-reading (which were fully required). Although it had been planned as an in-person hearing, in the event the hearing was conducted remotely for Covid-related reasons.

APPROACH TO THE DISPUTE

10. A very considerable amount of witness evidence has been filed in relation to the jurisdiction challenges, both in support of them and in response to them or to the evidence filed. Evidence has been provided on behalf of the Second to Twelfth Defendants in the form of four witness statements from Ms Sophie Eyre, a partner at their solicitors Bird & Bird. Both of the Fifteenth and Sixteenth Defendants have also provided witness statements, and three witness statements have been supplied by Mr David Foster, a partner at their solicitors O'Melveny & Myers. For TTL there have been two further witness statements from Dr Wright and a further statement from Mr Cain. Needless to say, the exhibits were also voluminous.
11. Apart from their shared interest in digital assets, there is very little common ground between the Claimant and the Defendants. Evidence was generally not accepted even where it was not specifically challenged. Dr Wright's credibility is heavily contested by the Defendants, who are in turn heavily criticised by Dr Wright. A significant level of animosity exists which is much broader than, and the origins of which pre-date, the particular dispute before this court.
12. I make two points about this. First, the court is and will remain concerned to ensure that these proceedings are not used as a vehicle to air those broader issues, as opposed to ensuring that the issues actually before it are properly determined in accordance with the overriding objective.
13. Secondly, the extent of the factual evidence filed has not assisted the court to resolve the jurisdiction challenges. From the court's perspective it took up a considerable amount of time in preparing for the hearing that should more properly have been devoted to consideration of the legal issues. It was, frankly, an unhelpful distraction. From the Defendants' perspective it only served to highlight the existence of material factual disputes that it was wholly unrealistic to think could (or should properly) be resolved by a summary procedure, without disclosure and oral evidence, including most likely expert evidence. The Defendants' evidence was certainly not sufficiently strong to enable me to conclude that TTL's factual case was no more than fanciful.

14. Following an indication to that effect early in the hearing, all Counsel focused their submissions on the legal issues. They were right to do so.
15. There is a further point that I need to make, however. Whilst, to an extent, it is understandable that numerous authorities were relied on by both parties in support of their legal submissions, what also stood out was the number of additional authorities relied on in addition to those referred to in skeleton arguments. By the third day of the hearing the supplementary authorities bundle included 23 additional cases, in addition to the 144 included in the initial combined authorities bundle (and 28 non-case law authorities). Yet further authorities were referred to, at speed, during the final day of the hearing. The additions were to a material extent attributable to developments in TTL's case (discussed below), but more generally the apparent lack of co-operation between the parties to ensure that the case was presented in a manageable way in the time available, preferably with an agreed list of issues to address, did not assist the court.

THE CLAIM

Digital assets and the Networks

16. A number of the relevant concepts are explained in the *Legal Statement on Cryptoassets and Smart Contracts* published by the UK Jurisdiction Taskforce in November 2019 (the "Taskforce Statement"). It describes how in October 2008 the pseudonymous Satoshi Nakamoto published a paper entitled *Bitcoin: A Peer-to-Peer Electronic Cash System* (the "White Paper"). (One of the many disputes between the parties, which does not need to be resolved in these proceedings, is that the Defendants do not accept Dr Wright's claim that he is Satoshi Nakamoto.)
17. The White Paper proposed a new electronic payment system based on cryptographic proof and using digital assets or tokens (bitcoins) as an alternative to payment systems using conventional currency that rely on third party financial institutions. Since then a number of different systems have been developed. Dr Wright maintains that the original bitcoin, and the only one properly so-called, is that held through the BSV Network. My use of the term bitcoin in this judgment reflects common usage, rather than being intended to express a view on that point, which is not relevant to my decision.
18. Transactions involving digital assets are recorded in a ledger or database known as a blockchain, with each network having its own one. The blockchain constitutes a public registry recording every transaction in the relevant digital asset. However, whilst the blockchain will show that a transaction has taken place and therefore the location of the asset on the network, it will not disclose the identity of the parties to that transaction. Instead, the assets are shown as held at a digital address. Addresses have both public keys, which identify them on the network, and private keys, knowledge of which allows dealings in assets held at that address to occur through the use of a digital signature. Both forms of address comprise a series of letters and numbers.
19. One area of controversy between the parties relates to the role of nodes. TTL's position is that that concept is restricted to devices on the network that undertake

“mining” of digital assets, that is the validation of transactions, proving that there has been no double spending. Nodes work in competition with each other to gather together transactions into blocks and then attempt to verify the block by calculating a “proof of work”. Blocks that have been verified are broadcast to the network and incorporated into further work. Miners receive both transaction fees and new digital assets (which, at least in the case of the BSV Network, derive from a fixed number set when the network was established) for their work. It can be highly profitable work, using significant amounts of computer processing power. Some very substantial commercial organisations are involved, often with whole datacentres or “server farms” linked to a particular node on a network.

20. TTL’s case is that the BTC, BCH and BCH ABC Networks were all initially created by copying the blockchain of a pre-existing network (being BSV in 2017 in the case of BTC, BSV in 2018 in the case of BCH, and BCH in 2020 in the case of BCH ABC), but applying different protocols and software instructions thereafter. Dr Wright’s evidence is that this followed disputes between the developers. The effect of copying is that all historic transactions up to the point of creation of an additional Network are the same as for the Network from which the blockchain was copied. This is the reason that all four Networks are involved here: TTL’s case is that the relevant assets were held on the BSV Network and have been replicated in the others through the process just referred to, including (in the case of the BCH ABC Network) after the hack occurred. I should clarify that whilst this is TTL’s case, the Fifteenth and Sixteenth Defendants do not accept that the BSV Network is the original one or that the BCH ABC Network was produced by copying it or a derivation of it.
21. A further point worth noting is that TTL’s position is that it is incorrect to suggest that digital assets may only be transferred using private keys. Dr Wright maintains that it is not technically difficult for a patch to the computer code that operates the relevant Network to be developed which would have the effect of transferring the digital assets to which access has been lost to a new address. That new address would have a (new) private key, which the rightful owner could then use to regain access to their digital assets, and a public key¹. TTL claims alternatively that the patch the Defendants could provide could ensure that TTL regains control of the assets in their existing locations, which I assume would involve allocating replacement private keys to the existing addresses. In either case, however, the relief sought is a patch which would resolve the position for TTL alone.
22. In contrast, Dr Wright’s evidence is that nChain, a company of which he is the chief scientific officer, is in the process of developing more complex software that would modify the “client software” used on the BSV Network to provide a systemic solution which would allow assets to be frozen and control to be returned on a case-by-case basis.

TTL, the digital assets and alleged hack

23. TTL was incorporated in the Seychelles in July 2011. It is owned, through another Seychellois company, by an Antiguan company whose shareholders are Dr

¹ For the purposes of this decision I do not need to address the point that a transfer of a digital asset may strictly create a new asset at the new address: see the Taskforce Statement at paragraph 45.

Wright and his wife Ms Ramona Ang. The shares they own are in turn held on behalf of a trust known as the Tulip Trust, the trustee of which is Ms Ang and whose beneficiaries are Dr Wright, Ms Ang and their three children.

24. TTL's case is that it is resident in this jurisdiction on the basis that its business is managed and controlled in England, that it has been so resident throughout the period relevant for the purposes of this dispute (during which period either Dr Wright or his wife have acted as CEO), and that it has not carried on any business activity in the Seychelles.
25. TTL maintains that it is the owner of digital assets valued at over £3 billion at two addresses on the Networks, which I will refer to as "1Feex" and "12ib7". Its claim to ownership is supported by Dr Wright's witness evidence, but documentary support is limited. What documentary evidence there is also does not demonstrate that TTL, as opposed to another entity under Dr Wright's control (or that of his family), owns the assets. In summary:
 - a) There is some evidence of the purchase of bitcoin at the 1Feex address in February 2011, in the form of a contemporaneous purchase order prepared by Dr Wright's then wife, Lynn Wright. There are some issues with the content of that document, but not its metadata, which has been analysed by a third party, AlixPartners.
 - b) Dr Wright claims that the purchase was made by the trust which became the Tulip Trust, and that the bitcoin was transferred on to TTL. He says that this occurred in July 2011 when TTL was incorporated. However, there is evidence suggesting that TTL was not controlled by the family until October 2014, having remained a shelf company until that point.
 - c) There are also some contemporaneous accounting records of companies associated with Dr Wright that record bitcoin held at the two addresses following its acquisition. Two pieces of relevant accounting software have also been analysed by AlixPartners. These show bitcoin held in February 2011 at the 1Feex address in the case of one system, and by January 2014 at both the 1Feex and 12ib7 addresses in the case of the other system. As with the purchase order there are some issues with the content of the records, but they appear to show that entities related to Dr Wright recorded assets held at the two addresses from 2011 and at least 2014 respectively. However, the available financial statements for TTL for the period between incorporation and May 2017 appear to show no ownership of digital (or other) assets. Although I saw no evidence to this effect, I note that the absence of accounting entries might be explicable if TTL received the assets via a contribution from an associated entity, and paid nothing for them.
 - d) Control of both addresses was disclosed by Dr Wright to the Australian Tax Office ("ATO") in an email sent on 10 October 2013, and in the course of audits that followed. Whilst the Defendants rely on disclosure having been made in the context of a claim for tax credits, and on adverse findings made by the ATO, there is force in TTL's contention that it would have made no sense for ownership to be disclosed of assets that Dr Wright did not own or

control, given the exposure to tax on capital gains on the very significant increase in value of digital assets.

- e) Although some competing claims to ownership have been made in respect of the 1Feex address, TTL's position is that none are seriously credible or have been pursued.
26. One point to note is that, given the date on which TTL appears to have come under the family's control, its alleged acquisition of the assets could only have been by an "off-chain" transfer, that is one not recorded on the blockchain. I do not consider that this makes any material difference to the issues that I need to decide.
27. Dr Wright's evidence of the alleged hack can be summarised as follows. The private keys were contained in encrypted "wallet.dat" files contained in a further password protected file on his computer system at his home office in Surrey. The password was contained in a digital password safe. Both the password protected file and the digital safe were stored and synced with two cloud storage services. Dr Wright did not store details of the private keys in any other location.
28. Dr Wright had not accessed the wallet.dat files for a number of years. He had set up a scheme of algorithmic masking to protect the mechanism for opening the files, but had stored sufficient notes in the digital safe to remind him of the scheme used and the data he needed to access the files.
29. On 8 February 2020 Dr Wright accessed a separate wallet containing other digital assets (the "Electrum wallet") and noticed transactions on 5 February 2020 that neither he nor his wife had actioned. The system logs had been erased. He discovered that bitcoin then worth around £1.1 million had been taken from the Electrum wallet (together with a small further amount), and that the password protected file containing the wallet.dat files and the password safe data had also been taken, along with research work. The versions stored in the cloud systems were also deleted as a result of the syncing mechanism.
30. The hack was reported to Surrey police. There is no indication that material progress has been made towards identifying the perpetrators.
31. As with TTL's ownership of the assets, the Defendants challenge whether a hack occurred as alleged. Among other things, they question one of Dr Wright's responses to the alleged hack, which was to wipe his hard drives, and also question why, if there was a successful hack, the assets have not been moved.

The Defendants' alleged control of the Networks

32. A further, and central, part of the factual dispute between the parties is TTL's claim that the Defendants control the Networks, and are able to take steps to allow TTL to regain control of the assets that it says it has lost.
33. TTL's case is that the Defendants control the Networks because they choose the software to be applied, decide whether or not to implement changes to it (using a process called "merge commit" in the case of the BTC Network), and more

generally direct and/or have significant influence over the Network in question. It says that if nodes failed to apply a software update then they would become unable to mine the Network in question from the perspective of the majority of users, which would be against their controllers' (substantial) commercial interests. Further, nodes are not able to make their own modifications to software that can be used on the Networks unless they are approved by the developers.

34. The Defendants challenge this, portraying (particularly in the case of the BTC Developers) a decentralised model in which, to the extent that they are or continue to be involved in software development for the Networks (which is disputed for some of them), they are part of a very large, and shifting, group of contributors without an organisation or structure. Further, any change that they were able to propose to address TTL's complaint would be ineffective, because miners would refuse to run it and instead would continue to run earlier versions of the software. What TTL sought went against the core values of bitcoin as a concept. A disagreement could lead to a "fork" in the Networks, resulting in the creation of additional networks rather than a resolution of the issue. The Fifteenth and Sixteenth Defendants also claim that if they attempted to make the changes sought to the BCH ABC Network it would have a severely detrimental effect on their reputations, and participants would refuse to adopt them.
35. TTL disputes this, maintaining that there is no mechanism among miners that could allow for a collective refusal to accept a software update, the consensus mechanism that does exist being limited to the acceptance by nodes of blocks of transactions verified by other nodes (by using the hash value produced as the starting point for the next block), rather than relating to the protocols that govern the Network. A fork would only be created if some of the developers refused to make the change. If some developers produced rival protocols, then a split could occur, such as those that resulted in the different Networks in this case. However, the controlling developers are parties to these proceedings and would be bound by the court's order.

LEGAL PRINCIPLES

Service out: general principles

36. The principles to apply in determining whether permission should be granted to serve proceedings out of the jurisdiction were summarised by the Court of Appeal in *VTB Capital plc v Nutritek International Corp & Ors* [2012] EWCA Civ 808; [2012] 2 Lloyd's Rep 313 ("*Nutritek CA*") at [99]-[101]. The claimant must satisfy the court that:
 - a) there is a serious issue to be tried on the merits of the claim (being a substantial question of fact or law or both), as to which it must be demonstrated that there is a real, as opposed to a fanciful, prospect of success;
 - b) there is a good arguable case that the claim falls within one or more of the classes for which leave may be given set out in paragraph 3.1 of Practice

Direction 6B (the “gateways”), good arguable case meaning, essentially, the better of the argument on the material available;

- c) that in all the circumstances (i) England is clearly or distinctly the appropriate forum for the trial of the dispute, and (ii) the court ought to exercise its discretion to permit service of the proceedings out of the jurisdiction. The first part of this test reflects the requirement of CPR 6.37(3) that “England and Wales is the proper place in which to bring the claim”. The court’s task is “to identify the forum in which the case can be suitably tried for the interests of all the parties and for the ends of justice” (*Nutritek CA* at [101], referring to *Spiliada Maritime Corporation v Cansulex Ltd* [1987] AC 460 (“*Spiliada*”); see also the Supreme Court decision in *Nutritek*, [2013] 2 AC 337 at [12]-[13]). Under the second part of this test the court retains a discretion to stay the proceedings rather than permit service out, even if the other requirements are met.

Serious issue to be tried

37. As made clear in *Altimo Holdings and Investment Ltd v Kyrgyz Mobil Tel Ltd* [2011] UKPC 7; [2012] 1 WLR 1804 (“*Altimo*”) at [82] and *Vedanta Resources v Lungowe* [2019] UKSC 20; [2020] AC 1045 (“*Vedanta*”) at [42], the standard of real prospect of success is the same as for summary judgment, as to which see *Easyair Ltd v Opal Telecom Ltd* [2009] EWHC 339 (Ch) at [15]. The claim must be more than merely arguable. Whilst the court must not conduct a mini-trial, it must take account of the available evidence and also evidence that can reasonably be expected to be available at trial. But there may be a point of law on which the court should “grasp the nettle”. The court should not allow the case to proceed because something may turn up.

Good arguable case

38. “Good arguable case” was further explained by Lord Sumption in *Brownlie v Four Seasons Holdings Inc* [2017] UKSC 80; [2018] 1 WLR 192 (“*Brownlie I*”) at [7] to mean:

“... (i) that the claimant must supply a plausible evidential basis for the application of a relevant jurisdictional gateway; (ii) that if there is an issue of fact about it, or some other reason for doubting whether it applies, the Court must take a view on the material available if it can reliably do so; but (iii) the nature of the issue and the limitations of the material available at the interlocutory stage may be such that no reliable assessment can be made, in which case there is a good arguable case for the application of the gateway if there is a plausible (albeit contested) evidential basis for it...”

39. This passage was endorsed by the Supreme Court in *Goldman Sachs International v Novo Banco SA* [2018] UKSC 34; [2018] 1 WLR 3683 (“*Goldman Sachs*”) at [9]. It was then considered in some detail by Green LJ in *Kaefer Aislamiento v AMS Drilling Mexico* [2019] EWCA Civ 10; [2019] 1 WLR 3514 at [72]-[80]. In particular, and apart from limb (iii), it is a relative test, being the better of the arguments (not “much” the better as previously suggested), and not

a balance of probabilities. Limb (ii) is an instruction to use judicial common sense and pragmatism. Limb (iii) allows for a more flexible test where the court is unable to say who has the better argument. Further, in expressing a view on jurisdiction the court must be astute not to express a view on the merits, even if there is a close overlap with issues going to jurisdiction.

Approach to questions of law

40. Where a question of law goes to the existence of jurisdiction, such as whether a claim falls within one of the gateways, the court will normally decide it rather than determining whether there is a good arguable case on that issue: *Nutritek CA* at [99] and *Altimo* at [81].
41. In *Altimo* at [82]-[86] Lord Collins considered the position where the viability of a claim depends on a substantial issue of law. The context there was reliance on the “necessary or proper party” gateway, which required consideration of whether the claim against the “anchor” defendant in the jurisdiction (D1 in that case) was “bound to fail”, which Lord Collins equated with the “serious issue to be tried” test for practical purposes.
42. At [84] Lord Collins referred to the general rule that it is not normally appropriate in a summary procedure to decide a controversial question of law in a developing area, it being desirable that any further development is on the basis of actual and not hypothetical facts, and it being no part of the court’s function “to decide difficult questions of law which call for detailed argument and mature consideration”. At [85] he referred to Lord Goff’s statement in *Seaconsar Far East Ltd v Bank Markazi Jomhouri Islami Iran* [1994] 1 AC 438, 452 that if there remained a substantial issue of fact or law the court should as a rule allow service, the standard of proof being, broadly, whether there was a serious question to be tried. He then went on to say this at [86]:

“86. There is no reason why the same principle should not apply to the question whether, in a service out of the jurisdiction case on the “necessary or proper party” head, a claim is “bound to fail” as well as to the question whether there is a “serious issue to be tried” in the claim against D2. Prior to the modern authorities on striking out, summary judgment, and interlocutory injunctions, the point was considered in the context of “necessary or proper party” in *The Brabo* [1949] AC 326. In that case it was held that the claim against D1 was bound to fail because the claim against it was made as agent of the Crown and it was therefore entitled to Crown immunity (as it then was). That was not a case where the point of law was a difficult one. Lord Porter said, at p 341, that “when the various Acts and provisions are collated the answer is clear”. Consequently the observations of the members of the Appellate Committee are obiter, but although they do not all put it in the same way, the overall effect of the decision is that if the question is whether the claim against D1 is bound to fail on a question of law it should be decided on the application for permission to serve D2 (or on the application to discharge the order granting permission), but not where there is an exceptionally difficult and doubtful point of law: Lord Porter, at p 341, and cf, at p 338 per

Lord Porter; Lord du Parcq, at p 351. Contrast Lord Simonds, at p 348: “the court should not easily be deterred by any apparent difficulty or complexity of subject matter from considering and, if it can do so at that stage, forming an opinion on the question whether the action is bound to fail against the defendants within the jurisdiction.””

43. Mr Ramsden, for the Second to Twelfth Defendants, very fairly submitted that the statements in this paragraph about deciding a question of law unless it was exceptionally difficult or doubtful were intended to apply only to questions going to jurisdiction, and not whether there is a serious issue to be tried on the merits. I agree that Lord Collins made the point at [86] in the context of the “necessary and proper party” gateway, although there is some indication that he would have applied the same approach to the question of serious issue to be tried (see in particular the first sentence of that paragraph). However, there is a distinction between the situation he was considering and the facts of this case, because the merits of the claim against D1 were directly relevant to the existence of jurisdiction. Further, Lord Collins’ statement at [81] that a question of law should normally be decided if it “goes to the existence of jurisdiction” reflects well established law: see for example *Airbus SAS v Generali Italia SpA* [2019] EWCA Civ 805; [2019] 2 Lloyd’s Rep 59 at [52] (per Males LJ, with whom Lewison and Davis LJ agreed). Lord Collins also referred at [84] to the well-established principle that it is not normally appropriate in a summary procedure to decide a controversial question of law in a developing area.

44. This last point was repeated by Lord Briggs, again in the context of a jurisdiction challenge, in a passage in *Vedanta* on which TTL relied. After referring to the early stage of proceedings and the absence of cross-examination and disclosure, Lord Briggs said this at [48]:

“It might be thought that an assertion that the claim against Vedanta raised a novel and controversial issue in the common law of negligence made it inherently unsuitable for summary determination. It is well settled that difficult issues of law of that kind are best resolved once all the facts have been ascertained at a trial, rather than upon the necessarily abbreviated and hypothetical basis of pleadings or assumed facts.”

45. In the Court of Appeal decision in *Vedanta* ([2017] EWCA Civ 1528; [2018] 1 WLR 3575) Simon LJ had considered this part of Lord Collins’ judgment in *Altimo* at [60]-[63], again in the context of the “necessary or proper party” gateway, and concluded as follows at [63]:

“... (1) In general, a real issue between the relevant parties is to be equated with a properly arguable case or serious question to be tried. (2) Where the argument or question goes to the existence of the jurisdiction, it should be decided if the facts are clear. (3) However, if the facts are not clear or the point of law is exceptionally difficult and doubtful, the test should remain that set out in (1) above. (4) This leaves open the question of the extent to which the facts are clear, and what amounts to “exceptionally difficult and doubtful” points of law.

As to the former point, the observations in [84] of the *Altimor Holdings* case suggest that the court should proceed on the basis of a pleaded case. So far as the latter point is concerned, it might be thought that the more doubtful the point of law, the more cautious the court should be, since the question of law goes to the existence of the jurisdiction.”

Forum

46. In relation to the appropriate forum, the court will consider what factors point in the direction of another forum, seeking to identify the forum with which the action has the most real and substantial connection and taking account of matters affecting convenience and expense, including the location of the parties and witnesses, as well as other matters such as governing law (the significance of which will vary from case to case). In exercising the court’s discretion under the second stage of this test the court will take into account all the circumstances, including matters going beyond those already considered. (See Lord Goff’s judgment in *Spiliada* at pp.475-484.)

Other points

47. There was no dispute between the parties that, on a jurisdiction challenge, the court’s role is to reconsider, effectively by rehearing, whether permission to serve out should be given: *Microsoft Mobile OY (Ltd) v Sony Europe Ltd* [2017] EWHC 374 (Ch); [2017] 2 Lloyd’s Rep 119 (“*Microsoft*”) at [91]. The test must also be satisfied on the evidence relating to the position as at the date when the proceedings were commenced: *Goldman Sachs* at [9]. Further, the burden of proof is on the claimant.
48. A further point worth making is that, where more than one claim is made, each of them must fall within a gateway. If an individual claim does not then there is no power to grant permission in respect of it (see *Microsoft* at [104]).

The relevant gateways

49. The gateways relied on are 4A, 9(a) and 11, which provide as follows:

“(4A) A claim is made against the defendant in reliance on one or more of paragraphs (2), (6) to (16), (19) or (21) and a further claim is made against the same defendant which arises out of the same or closely connected facts. ...

(9) A claim is made in tort where –

(a) damage was sustained, or will be sustained, within the jurisdiction. ...

(11) The subject matter of the claim relates wholly or principally to property within the jurisdiction...”

50. TTL relies on gateways 9(a) and 11 in respect of both its tortious and fiduciary claims, and 4A in the event that either claim does not fall within those other gateways. Birss J explained in *Eli Lilly & Co v Genentech Inc* [2017] EWHC 3104 (Pat); [2018] 1 WLR 1755 at [31]-[33] that, in determining whether gateway 4A applies, account should be taken of pragmatic considerations such as

procedural economy and an avoidance of inconsistent results. Where facts unique to one claim would require extensive cross-examination and disclosure to resolve, that would indicate that the connection was insufficiently close.

MERITS: SERIOUS ISSUE TO BE TRIED

51. This section of my judgment considers the relevant issues in the following order:

- a) ownership of the bitcoin and the alleged hack;
- b) fiduciary duties;
- c) tortious duties;
- d) whether there has been an impermissible change of case;
- e) the offer to pay for the work;
- f) the significance of policy considerations; and
- g) the effectiveness of any remedy.

Issues d)-g) overlap with issues b) and c). The division is intended to assist the reader, rather than to indicate any bright line distinctions.

Ownership of bitcoin and the alleged hack

52. These matters can be dealt with shortly. I am satisfied that there is a serious issue to be tried that TTL is the owner of the bitcoin at the 1Feex and 12ib7 addresses, and that the hack occurred. The Defendants challenge TTL's case on these points, pointing to a number of deficiencies in the quality of the evidence which they say are likely to remain at any trial. I agree that there are material deficiencies, but I do not consider that they justify a conclusion that TTL has no more than a fanciful prospect of establishing ownership and the fact of the hack. Dr Wright's evidence, which is not entirely unsupported by documentary evidence, cannot simply be dismissed as not being credible on a summary determination. Insofar as relevant to the jurisdictional gateways, I would also conclude that TTL has the better of the arguments on these points on the basis of the available evidence, or at least that there is a plausible evidential basis (limb (iii) in Lord Sumption's formulation in *Brownlie 1*, see [38] above).

Fiduciary duties

The legal principles

53. TTL claims that the Defendants owe fiduciary duties, as a consequence of which they are or can be required to take all reasonable steps to provide it with access to and control of the bitcoin in the addresses, and to take all reasonable steps to ensure that effect is not given to the fraud. (To the extent that the relief claimed appeared to impose an absolute obligation on the Defendants, rather than the taking of reasonable steps, that was not pursued in oral submissions.) The failure

to take such steps is said to amount to a breach of fiduciary duty, which justifies an order requiring such steps to be taken and/or equitable compensation.

54. In *Bristol and West Building Society v Mothew* [1998] Ch 1 (“*Mothew*”) at p.18A Millett LJ described a fiduciary as follows:

“A fiduciary is someone who has undertaken to act for or on behalf of another in a particular matter in circumstances which give rise to a relationship of trust and confidence. The distinguishing obligation of a fiduciary is the obligation of loyalty. The principal is entitled to the single-minded loyalty of his fiduciary.”

55. There must therefore be some undertaking to act for another, such that a relationship of trust and confidence arises. The potential vulnerability to abuse to which that gives rise is reflected in a duty, recognised by equity, that the fiduciary will act only in the interest of his principal and not adversely to that interest, and in particular that the fiduciary will subordinate his own interest to that of the principal.
56. This has sometimes been referred to in terms of a legitimate expectation. In *Arklow Investments Ltd v Maclean* [2000] 1 WLR 594 at 598G the duty of loyalty was described as encompassing, in the context in question (an alleged breach of duty by bankers to whom confidential information had been provided):

“... a situation where one person is in a relationship with another which gives rise to a legitimate expectation, which equity will recognise, that the fiduciary will not utilise his or her position in such a way which is adverse to the interests of the principal.”

This formulation was also referred to by Kitchin LJ in *Farrar v Miller* [2018] EWCA Civ 172 at [75].

57. Similarly, in *Lehtimäki v Cooper* [2018] EWCA Civ 1605; [2019] Ch 139, the Court of Appeal adopted the following formulation, originating from the Federal Court of Australia:

“...a person will be in a fiduciary relationship with another when and in so far as that person has undertaken to perform such a function for, or has assumed such a responsibility to, another as would thereby reasonably entitle that other to expect that he or she will act in that other’s interest to the exclusion of his or her own or a third party’s interest...”

58. In the Supreme Court in that case (*Children’s Investment Fund Foundation (UK) v Attorney General and others* [2020] UKSC 33; [2022] AC 155) Lady Arden said at [45] that:

“... the “distinguishing obligation” of a fiduciary is that he must act only for the benefit of another in matters covered by his fiduciary duty. That means that he cannot at the same time act for himself.”

She went on to comment on the Court of Appeal's formulation at [48]:

“This formulation introduces the additional concept of reasonable expectation of abnegation of self-interest. Reasonable expectation may not be appropriate in every case, but it is, with that qualification, consistent with the duty of single-minded loyalty.”

59. Lady Arden also explained at [51] that it is “... important to examine the very specific context in which it is said that a fiduciary duty arises”. Fiduciary obligations may attach only to part of the relationship between the parties. On this, see also *New Zealand Netherlands Society “Oranje” Inc v Kuys* [1973] 1 WLR 1126 at 1130C.
60. Mr Wardell, for TTL, rightly submitted that the test described by Millett LJ of undertaking to act must not be misunderstood. The existence of fiduciary duties is not dependent on a subjective or voluntary assumption of them, but is a consequence of the nature of the role assumed or task undertaken, objectively determined: *Vivendi SA v Richards* [2013] EWHC 3006 (Ch); [2013] BCC 771 at [139]. As Sales J said in *F & C Alternative Investments (Holdings) Ltd v Barthelemy (No.2)* [2011] EWHC 1731 (Ch); [2012] Ch 613 at [225], fiduciary duties are “obligations imposed by law as a reaction to particular circumstances of responsibility assumed by one person in respect of the conduct of the affairs of another”.
61. Where a fiduciary has more than one principal with potentially conflicting interests, acting for one without the informed consent of the other amounts to a breach of the obligation of undivided loyalty (*Mothew* at p.18H), albeit that informed consent can be implied: *Kelly v Cooper* [1993] AC 205, in the context of estate agents. Further, a fiduciary must act in good faith in the interest of each such principal, not with the intention of furthering the interest of one to the prejudice of the other, and:

“... must not allow the performance of his obligations to one principal to be influenced by his relationship with the other. He must serve each as faithfully and loyally as if he were his only principal.” (*Mothew* at p.19D-E).
62. In addition, actual conflicts must be avoided, and if they arise the fiduciary may have to cease to act. The existence of a conflict will not absolve a fiduciary of liability for a breach of duty (*Mothew* at p.19H).

TTL's case on fiduciary duties

63. Mr Wardell accepted that the Defendants are not in a category that has previously been recognised as owing fiduciary duties (such as trustee and beneficiary; principal and agent; solicitor and client; company directors and the company; partners and co-partners), but submitted that this is a case where the particular facts and circumstances justify the imposition of fiduciary duties, referring to *Thomas v Barclays Bank* [2014] EWHC 2882 (QB) at [87]. Mr Wardell also relied on the principle set out in *Wood v Commercial First Business Ltd* [2021] EWCA Civ 471; [2021] 3 WLR 395 at [24] that a person:

“... is not subject to fiduciary obligations because he is a fiduciary: it is because he is subject to them that he is a fiduciary.”

64. Mr Wardell placed particular reliance on an alleged significant imbalance of power through the control the Defendants are said to have over the Networks. He submitted that the test is fact-sensitive and ill-suited to summary determination, and further that the public interest concerns that arise weigh heavily against attempting it.
65. In more detail, Mr Wardell submitted that:
 - a) The Defendants have complete power over the system through which (highly valuable) digital assets are held.
 - b) Owners of digital assets have entrusted the care of their property to the Defendants, and are vulnerable to abuse by them.
 - c) In contrast to the Defendants, owners of digital assets have no control other than the ability to use their private keys.
 - d) The way in which the Defendants exercise control could substantially affect the interests of owners, and could destroy the value of their assets.
 - e) The Defendants (who it is alleged receive payment for their work) can and do make changes to the software from time to time. There is a reasonable expectation that the Defendants will not act capriciously, unreasonably or disloyally, so as to abuse their position.
 - f) The Defendants have the power to amend the protocol, including to allow owners to recover control of their assets or to stop or (effectively) reverse a fraudulent transaction, whereas owners have no such power and, without the private key, have no means of controlling their assets or, in practice, obtaining redress against fraud.
66. TTL points to some support for the existence of fiduciary duties in academic literature. The Defendants dispute this, relying on other academic literature challenging that. Although I have read the rival written submissions about this, I have not found it helpful to focus on the literature. It is not written from an English legal perspective and, furthermore, the existence of serious academic dispute does not assist the Defendants' case that the application of the relevant legal principles in this case are anything other than controversial, and in a developing area.
67. One difficult part of TTL's case, which was developed during oral submissions, was the extent to which it is founded on the alleged duties being owed to all participants in the Networks, or perhaps more strictly to all owners of digital assets recorded on the Networks, who are by definition an anonymous and fluctuating class with whom the Defendants have no direct communication, and certainly no contractual relationship. Mr Wardell submitted that the focus should be on the facts of this case as creating the alleged duties owed to TTL, rather than the position of class members generally. However, he did accept in response to my questions that it is a necessary part of TTL's case that the underlying

relationship between the Defendants and owners has a fiduciary quality, albeit that an obligation to take action only arose on the specific facts.

68. A related point is whether TTL's case has undergone an impermissible change. I will consider that point, and its potential implications, separately.

The Defendants' case on fiduciary duties

69. Mr Ramsden submitted that none of the features relied on by TTL addressed the distinguishing obligation of loyalty, the requirement that a fiduciary will not utilise his or her position in a way which is adverse to the interests of the principal, or (as expressed by Lady Arden) the reasonable expectation of abnegation of self-interest.
70. Mr Thorne, for the Fifteenth and Sixteenth Defendants, adopted these submissions, focusing on the apparent basis of TTL's case that fiduciary obligations are owed to all owners of bitcoin, and would involve the imposition of extensive duties to take positive action in potential conflict with the Defendants' duties to other owners.
71. Both Mr Ramsden and Mr Thorne relied on the comment of Lord Woolf MR in *Attorney General v Blake* [1998] Ch 439, 455 to the effect that fiduciary obligations are proscriptive, not prescriptive, in that equity "...tells the fiduciary what he must not do. It does not tell him what he ought to do". In this case the relief sought would require the Defendants to take positive action to write and implement software changes.

Discussion

72. At first sight it is very hard to see how TTL's case on fiduciary duty is seriously arguable. Having now given the matter more detailed consideration I have concluded that my initial impression was correct. Taking all the features relied on by TTL fully into account, and assuming in its favour that it would be able to establish the facts on which it relies at a trial, I am unable to conclude that TTL has a realistic prospect of establishing that the facts pleaded amount to a breach of fiduciary duty owed by the Defendants to TTL.
73. The foundation of TTL's case is the alleged imbalance of power, combined with an "entrustment" of property to the Defendants. However, whilst an imbalance of power, together with vulnerability to abuse of that power, is often a feature of fiduciary relationships and may in broad terms be a rationale for the concept², it is not a defining characteristic and is certainly not a sufficient condition for the existence of the duty. Further (and to the extent relevant), I do not think that bitcoin owners can realistically be described as entrusting their property to a fluctuating, and unidentified, body of developers of the software, at least in the sense and to the extent claimed by TTL.
74. This is not a case where it is alleged that, in making an update to the software, the Defendants acted in their own interests and contrary to the interests of owners,

² See for example *Snell's Equity*, 34th ed. at 7-001.

for example in introducing for their own advantage a bug or feature that compromised owners' security but served their own purposes. I can see that it is conceivable that some form of duty could be engaged in that situation, although whether it would properly be characterised as a fiduciary duty is another matter. At least it could be said that in that situation the developers making the update had arguably assumed some responsibility by performing that function, although I think it is much more doubtful whether that would amount to a relationship requiring single-minded loyalty.

75. In contrast, what is sought to be imposed here is a positive duty to alter software to introduce a patch to allow TTL to regain control of its assets. The undertaking to act or assumption of responsibility on which TTL has to rely is the Defendants' alleged control of the Networks and their alleged *ability* to make a change to the software, irrespective of whether they are actually engaged in making changes, and in the absence of any more general contractual or other obligation to make changes in the future. But developers are a fluctuating body of individuals. As a general proposition it cannot realistically be argued that they owe continuing obligations to, for example, remain as developers and make future updates whenever it might be in the interests of owners to do so.
76. Further, the distinguishing feature, or defining characteristic, of a fiduciary relationship is the obligation of undivided loyalty, whether expressed in terms of legitimate expectation or otherwise. This gives rise to a fundamental difficulty. Mr Wardell had to accept that it is a necessary part of TTL's case that the underlying relationship between the Defendants and bitcoin owners generally has a fiduciary quality. But the steps that TTL would require the Defendants to take would be for its benefit alone, and not for the benefit of other users. TTL seeks action allowing it to recover control of its assets, not a systemic software change that might be regarded as being for the benefit of users generally. The change sought could be to the disadvantage of other participants in the Networks, most obviously a rival claimant to the assets, but potentially other users more generally.
77. Mr Wardell sought to address this by rationalising the duty as owed to the (true) owners of bitcoin, not others. If TTL was established as the owner of the bitcoin at the 1Feex and 12ib7 addresses, then the relief sought would not breach any duty of loyalty to other owners. Although he accepted in oral submissions that any declaration of ownership that the court made would operate *in personam* and not *in rem*, developers would be protected from action by rival claimants by the existence of the court order and the ability of rival claimants to apply to set aside the court's decision under CPR 40.9.
78. I do not consider that this is a sufficient answer. It is uncontroversial that a fundamental feature of the Networks, at least in their existing form, is that digital assets are transferred through the use of private keys. TTL effectively seeks to bypass that. There must be a real risk that acceding to TTL's demands would not be consistent with a duty of single-minded loyalty owed to other users.
79. At a general level, some users may not agree that a system change that allowed digital assets to be accessed and controlled without the relevant private keys, contrary to their understanding of how the system is intended to operate, accords with their interests, even if made only following an order of the English court

declaring that TTL owns those assets. The fact that the BSV Network may be preparing to make a system change to accommodate loss of access to private keys (see [22] above) does not mean that any such change, whether a general one or specific to TTL, can be imposed on others.

80. Further, acceding to TTL's demands could expose the Defendants to risk on their own account. Apart from the potential difficulty I have just mentioned about the general expectations of other users, more specifically a rival claimant to the bitcoin in issue in this case could have a legitimate complaint against the Defendants, a complaint which would not necessarily be brought in the English courts, and against which they would not be protected³. This is a strong indication that the pleaded facts could not amount to a breach of fiduciary duty. Even if it could be argued that there was some form of relationship of trust and confidence, it does not follow that a duty of loyalty arises to TTL to the exclusion of the interests of others, whether third parties or the Defendants themselves.
81. Lady Arden cautioned that the concept of reasonable expectation adopted by the Court of Appeal in *Lehtimäki v Cooper* might not be appropriate in every case. However, I think it is of assistance in this case. I do not consider that there is a realistic prospect of establishing that there was a reasonable, or legitimate, expectation, that the Defendants would act only in TTL's interests, in circumstances where that could expose them to real risk. I do not consider it to be realistically arguable that the Defendants were reasonably expected to have assumed that risk.
82. In relation to the alleged obligation to take positive steps, Mr Wardell sought to distinguish *Attorney General v Blake*. The context there was an argument that George Blake owed a fiduciary duty to submit his autobiography for clearance before publication. I agree with Mr Wardell that it does not follow from Lord Woolf's comments that there are no circumstances in which the court will require a fiduciary to perform positive steps, where a fiduciary relationship has been found to exist. Examples include *Lehtimäki v Cooper* (where Dr Lehtimäki was required to vote in a particular way), and obligations placed on directors, such as to alert the company to threats to its business (*First Subsea v Balltec* [2014] EWHC 866 (Ch) at [187]), or disclose wrongdoing (*Fassihi v Item Software (UK)* [2004] BCC 994 at [41]-[44]), or to disclose an opportunity (*Bhullar v Bhullar* [2003] BCC 711 at [41]). However, the pleaded duties in this case go well beyond action of that nature, and as already indicated may expose the Defendants to risk. This is so even if it were to transpire that the software patch is easily written and implemented.
83. As already indicated, at a general level I can see that any holder of digital assets on the Networks will have certain expectations, for example about the security of the Network and private keys, the efficacy of the "proof of work" processes and indeed anonymity. A software change that compromised these might engender some cause for complaint by users (although that is far from saying that any duty that might arise in those circumstances would necessarily be in the nature of a

³ It is worth noting, although by no means determinative of this point, that TTL has not sought to join as parties any third parties who have asserted rival claims, but rather has reached its own conclusion that those claims are not seriously credible.

fiduciary duty). But what I cannot see is a realistic basis for concluding that the pleaded facts could provide a basis for the imposition of a fiduciary duty in favour of TTL, together with a conclusion that that duty has been breached.

Tortious duties

84. TTL also claims that the Defendants are in breach of a duty of care by failing to include in the software means to allow those who have lost their private keys or had them stolen to access their bitcoin, failing to include sufficient safeguards against wrongdoing by third parties, and failing to take steps to give TTL access and/or control or otherwise protect TTL against fraud or allow it to seek to put right any fraud that occurs in the future.

The legal principles

85. The Supreme Court has made clear that, in identifying whether a duty of care exists, an incremental approach should be adopted, based on an analogy with established categories of liability: *N v Poole Borough Council* [2020] AC 780 (“*Poole*”) at [64]; *Robinson v Chief Constable of West Yorkshire Police* [2018] UKSC 4; [2018] AC 736 (“*Robinson*”) at [27] and [29]. Further, *Caparo v Dickman* [1990] 2 AC 605 did not lay down a universal tripartite test (of (i) foreseeability, (ii) proximity and (iii) fairness, reasonableness and justice), although the question whether the imposition of a duty of care would be fair, just and reasonable forms part of the assessment of whether an incremental step should be taken.
86. A further point to keep in mind in this case is that any loss suffered by TTL is properly characterised as purely economic. (TTL made written submissions to the contrary but Mr Wardell rightly did not pursue them orally.) There is no element of physical harm to person or property. It follows that no common law duty of care can arise in the absence of a special relationship: see for example *Clerk & Lindsell on Torts*, 23rd ed. at 7-103 and *Murphy v Brentwood* [1991] 1 AC 398 at 475. The special relationship concept has been rationalised in terms of an assumption of responsibility, assessed objectively: *Henderson v Merrett Syndicates* [1995] 2 AC 145 at 180-181, per Lord Goff. This was further discussed in *Customs and Excise Commrs v Barclays Bank* [2007] 1 AC 181 (“*C&E v Barclays Bank*”), where it was also made clear that assumption of responsibility is not a universal test (see the judgments of Lord Bingham at [4]-[5], Lord Rodgers at [52] and Lord Mance at [87] and [95]). It is also clear that the incremental approach described in the previous paragraph is particularly important where relief is claimed in respect of pure economic loss: *Davis v Radcliffe* [1990] 1 WLR 821 at 826E.
87. Further, in this case the complaints made are essentially of failures to act. However, there is no general duty to protect others from harm. Traditionally this was expressed in terms of the common law not imposing liability for pure omissions (see for example *Smith v Littlewoods* [1987] AC 241 at 271C and *Stovin v Wise* [1996] AC 923 at 943-944), but it was expressed as follows by Lord Reed in *Poole* at [28] (in the context of public bodies):

“28. Like private individuals, public bodies did not generally owe a duty of care to confer benefits on individuals, for example by protecting them from harm: see, for example, *Sheppard v Glossop Corpn* [1921] 3 KB 132 and *East Suffolk Rivers Catchment Board v Kent* [1941] AC 74. In this context I am intentionally drawing a distinction between causing harm (making things worse) and failing to confer a benefit (not making things better), rather than the more traditional distinction between acts and omissions, partly because the former language better conveys the rationale of the distinction drawn in the authorities, and partly because the distinction between acts and omissions seems to be found difficult to apply. As in the case of private individuals, however, a duty to protect from harm, or to confer some other benefit, might arise in particular circumstances, as for example where the public body had created the source of danger or had assumed responsibility to protect the claimant from harm: see, for example, *Dorset Yacht Co Ltd v Home Office* [1970] AC 1004, as explained in *Gorringe v Calderdale Metropolitan Borough Council* [2004] 1 WLR 1057, para 39.”

88. In this context, foreseeability is not enough: see for example *Mitchell v Glasgow City Council* [2009] 1 AC 874 at [15], [19], [39] and [76].
89. A related point is that the law generally imposes no duty of care to prevent third parties causing loss or damage, or for injury or damage caused by a third party: see for example *Michael v Chief Constable of South Wales Police* [2015] AC 1732 (“*Michael*”) at [97] and *Robinson* at [34] and [69(4)]. As Lord Goff explained in *Smith v Littlewoods*, this is so even if there is a “high degree of foresight that they may do so” (p.278C, and see also pp.270G, 271A and 279F).
90. However, there are some exceptions. In *Michael*, Lord Toulson went on to explain at [98]-[100] that the common law may impose liability for a careless omission where the defendant was in a position of control over the third party (the *Dorset Yacht* case being the classic example) or a positive responsibility has been assumed to safeguard the claimant. In *Robinson* Lord Reed put the point as follows at [69(4)]:

“... The central point is that the law of negligence generally imposes duties not to cause harm to other people or their property: it does not generally impose duties to provide them with benefits (including the prevention of harm caused by other agencies). Duties to provide benefits are, in general, voluntarily undertaken rather than being imposed by the common law, and are typically within the domain of contract, promises and trusts rather than tort. It follows from that basic characteristic of the law of negligence that liability is generally imposed for causing harm rather than for failing to prevent harm caused by other people or by natural causes. It is also consistent with that characteristic that the exceptions to the general non-imposition of liability for omissions include situations where there has been a voluntary assumption of responsibility to prevent harm (situations which have sometimes been described as being close or akin to contract), situations where a person has assumed a status which

carries with it a responsibility to prevent harm, such as being a parent or standing in loco parentis, and situations where the omission arises in the context of the defendant's having acted so as to create or increase a risk of harm.”

TTL's case on tortious duties

91. TTL accepts that the claimed tortious duty of care is novel, but says that it would amount to a permissible incremental extension of the law. The court should recognise an actionable duty owed to owners of digital assets who have lost access to their private keys by developers who are able to assist them to regain control of their assets. The three-stage test in *Caparo v Dickman* was met and a special relationship existed because of the Defendants' assumption of control of the Networks.
92. As pleaded, and by reference to its written submissions, TTL's case on duty of care did not depend on the existence of fiduciary duties. However, in oral submissions I understood Mr Wardell to base TTL's case on the existence of a fiduciary relationship. He relied on Lord Mance's judgment in *C&E v Barclays Bank* at [92] and [93] to argue that the fiduciary relationship between the parties amounted to the necessary special relationship, because the Defendants had voluntarily assumed responsibility for the relevant task by their control of the Networks. There were strong public policy reasons to ensure that they could not act (or presumably, fail to act) in a way that would have the effect of depriving owners of their digital assets.
93. In oral submissions Mr Wardell also relied on *Barclays Bank v Quincecare* [1992] 4 All ER 363 ("*Quincecare*") (which established a duty of care in the form of the existence of an implied term that a bank would refrain from executing a customer's order if put on enquiry that it was an attempt to misappropriate funds), and the discussion in *Federal Republic of Nigeria v JP Morgan Chase Bank* [2019] EWHC 347 (Comm) ("*JP Morgan*") at [26]-[31] where Andrew Burrows QC, sitting as a High Court judge, suggested that the *Quincecare* duty could extend beyond a negative duty (not to pay) to a positive duty of enquiry. The Networks could be equated with financial institutions, and the absence of a contractual relationship should not make a difference. Funds were being entrusted to controllers of the Networks, who profited from their activities, and public policy required the imposition of a corresponding duty of care.
94. As with its case on fiduciary duties, one issue is whether TTL's case has undergone an impermissible change. This, and the role of policy considerations, is discussed further below.

The Defendants' case on tortious duties

95. Mr Ramsden relied on the incremental approach endorsed by the Supreme Court, and observations, in particular by Lord Reed in *Robinson* at [69], effectively downplaying the role of policy considerations in determining the existence of a duty of care and (at [69(4)], set out above) emphasising the distinction between acts and omissions. He also relied on a disclaimer in the relevant software licence. He submitted that TTL's case amounted to asserting that there was a duty of care

to protect it not only from harm by third parties (theft of private keys) but from harm to itself (loss of, or failure to secure, private keys).

96. Mr Thorne adopted Mr Ramsden's submissions, and pointed among other things to the breadth of the duty sought to be imposed (which would apply to any loss of a private key) and the fact that inability to access cryptocurrency without a private key was fundamental to the system.

Discussion

97. I have already concluded that it is not realistically arguable that the pleaded facts amount to a fiduciary relationship. Based on Mr Wardell's oral submissions at least, that would indicate that the required special relationship to found a duty of care in respect of economic loss could not exist. I also cannot see that it is arguable that the necessary special relationship exists on some other basis such as to require the action that TTL seeks.
98. I can see that it might be arguable that, when making software changes, developers assume some level of responsibility to ensure that they take reasonable care not to harm the interests of users, for example by introducing a malicious software bug or doing something else that compromised the security of the Network. Further, if the Defendants do control the Networks as TTL alleges, it is conceivable that some duty might be imposed to address bugs or other defects that arise in the course of operation of the system and which threaten that operation.
99. However, that is not the complaint in this case. As already indicated, the complaint made is of failures to act. Further, the failures alleged are failures to make changes to how the Networks work, and were intended to work, rather than to address a known defect. In addition, there is no allegation that any of the Defendants had any involvement with the alleged hack, or that they have done anything to create or increase a risk of harm. Rather, what is complained of is that the Defendants have not taken action to alter how the system works to ensure that TTL regains control of the bitcoin following harm allegedly caused by a third party. That would require both a) the existence, solely by virtue of the Defendants' alleged control of the Networks, of a special relationship that continues even if no steps are actually being taken to alter software; and b) a requirement to take positive action to make changes, and in circumstances where there is no known bug or other defect preventing the software from operating as anticipated.
100. I do not consider that it is realistically arguable that the imposition of such a requirement could be treated as an incremental extension of the law, particularly bearing in mind that the alleged loss is an economic loss.
101. This is not a case like *Dorset Yacht* where it could be argued that the Defendants had control of the third party (the hackers). Realistically, TTL's case can only be based on the assumption, through control of the Networks, of a positive responsibility to safeguard owners (*Michael* at [98]-[100] and *Robinson* at [69(4)], referred to above). But even if the Defendants could be argued to assume some level of responsibility as a result of a role that they have decided to take on

in relation to the relevant Network, I cannot see how it could arguably extend as far as TTL requires.

102. I also bear in mind that, where the loss caused by a third party is purely economic, then it appears less likely that an exception would apply to the general rule that no liability will arise for damage caused by a third party: see *Davis v Radcliffe* at 827D-F, where Lord Goff suggested that it would be rare that liability would be imposed in such a case.
103. I am unpersuaded by any analogy with *Quincecare*. The starting point for that duty of care is the contractual relationship between the bank and its customer, and the fact that a banker acts as agent of the customer in executing payment instructions (see Rose LJ's decision on appeal in *JP Morgan*, [2019] EWCA Civ 1641, at [12]). As explained by Sir Geoffrey Vos C in the Court of Appeal decision in *Singularis Holdings Ltd v Daiwa Capital Markets Europe Ltd* [2018] EWCA Civ 84; [2018] 1 WLR 2777 at [87]-[88], the duty is owed only to the bank's customer, and not to a wider class. At [63] he had also described the *Quincecare* duty as "carefully calibrated". I do not detect anything in the Court of Appeal's recent decision in *Philipp v Barclays Bank* [2022] EWCA Civ 318 (which was handed down after the hearing) that affects these points.
104. This leads to a further relevant point, being the persons to whom any alleged duty would be owed. By definition the potential class in this case is unknown and potentially unlimited. As Mr Thorne pointed out, there would be no real restriction on the number of claims that could be advanced against the Defendants by persons who had allegedly lost their private keys or had them stolen. Lord Goff went on to say in *Davis v Radcliffe* at p.827G that the fact that the alleged duty would be owed to an unlimited class is another consideration militating against the existence of a duty of care. A similar point was made by Lord Mance in *C&E v Barclays Bank* at [100], who referred to the indeterminacy of any resulting liability as having been a factor militating against the recognition of a duty of care in respect of economic loss, and see also *Caparo v Dickman* at p.621.
105. In addition to the unlimited nature of the class to which the alleged duty would be owed, it is also worth emphasising its open-ended scope. Based on the pleaded case, the Defendants would be obliged to investigate and address any claim that a person had lost their private keys or had them stolen. How they would go about that in practice, given the anonymity of the system as well as the scope for off-chain transactions, is wholly unclear. As discussed in relation to fiduciary duties, the declaratory relief sought would be on an *in personam* basis rather than *in rem*. It follows that even if relief against the Defendants were dependent on a declaration being obtained (as to which see the next section of this judgment) it would not provide protection against rival claimants, from whom the Defendants might be accused of having expropriated assets. It is far from obvious that the Defendants could take steps to protect themselves by insurance. This also strongly indicates that, based on considerations of fairness, justice and reasonableness, no duty exists.
106. In contrast, owners of digital assets are able to take some steps to protect themselves against the loss of private keys, for example by keeping copies in different locations, and possibly by insurance.

107. Further, and as with the claim based on fiduciary duty, developers are a fluctuating body of individuals. Even if the Defendants currently have control of the Networks (as TTL asserts) it is hard to see how there is any basis for imposing an obligation which would require them to continue to be involved and make changes when required by owners, when they have given no previous commitment or assurance that they would do so and their previous involvement may well have been intermittent.
108. As already indicated, TTL has stressed that the issues raised by this case are of significant importance in terms of public policy. But that cannot itself provide a foundation for a claim at common law. (See further below on this aspect.)
109. In summary, the imposition of a duty of care of the nature sought by TTL could not be said to be an incremental extension, and – particularly given its potentially unlimited nature – cannot realistically be argued to be fair, just and reasonable. I reach this conclusion without needing to rely on a disclaimer in the software licence relied on by the BTC Developers, to which I will now briefly turn.

The disclaimer in the software licence

110. The BTC Developers also rely on an express disclaimer of liability in the terms of the generic MIT Licence under which Bitcoin Core code, in common with much other open source software, is released. The licence reads as follows:

“Copyright <YEAR> <COPYRIGHT HOLDER>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.” (Emphasis supplied.)

111. TTL’s position is that the licence is irrelevant, because its case does not relate to the reliability or use of the software, and in any event it would require extensive

evidence to determine the extent to which the scope and nature of the BTC software affects the application of the exclusion in this case. Mr Ramsden submitted that this misunderstood the point being made, which was that the existence of the disclaimer is relevant to the question whether a duty of care exists, and as in *Hedley Byrne v Heller* [1964] AC 465 itself, it could preclude a duty of care. It demonstrated that no responsibility was arguably assumed.

112. In *McCullagh v Lane Fox & Partners* [1996] PNLR 205, 237, Hobhouse LJ explained that the correct approach to a disclaimer in this context was not to treat it as an exclusion to be strictly construed, but as a fact relevant to the question whether responsibility had been assumed, the essence of the law of negligence being the application of objective standards of reasonableness. In that case it was clear from the exclusion that the defendants were not assuming responsibility for the accuracy of statements about the acreage of a property.
113. Whilst I accept that the disclaimer in the Bitcoin Core code is relevant to the existence of a duty of care, I would not have considered its application to the facts of this case to be sufficiently clear to make a difference to the outcome of a summary determination. It is true that the disclaimer is in broad terms, but it is not clear to me that it would reasonably be understood to mean that controllers of the BTC Network assume no responsibility for any aspect of its operation.

Actual or threatened breach: change of case?

114. As already indicated, one of the Defendants' complaints has been the onus that TTL's case would put on them to, among other things, investigate alleged wrongs, make decisions about (potentially) disputed ownership and then give effect to those decisions. This reflected TTL's allegations that the Defendants were already in breach of their duties by failing to assist TTL.
115. TTL disputed this. As developed in oral submissions, its case was that in the event that the Defendants admitted TTL's ownership of the bitcoin, there would be an existing breach. Otherwise, and pending a declaration of ownership in TTL's favour, there was an anticipated breach. Whilst its primary case was that there was no need for it to amend its statement of case because the amended claim form refers to the Defendants having "failed and/or it is anticipated that they will fail" to provide it with access and control, TTL would in any event be able to amend its statement of case without the permission to serve out being set aside: *NML Capital v Republic of Argentina* [2011] UKSC 31; [2011] 2 AC 495 ("*NML*").
116. Mr Wardell also submitted that the primary relief sought was injunctive relief. Injunctive relief was available on a *quia timet* basis in respect of an anticipated breach of tortious or fiduciary duty. He relied on *Clerk & Lindsell* at 28-01 and 28-02 and *Redland Brick v Morris* [1970] AC 652.
117. I prefer the Defendants' arguments on the pleading point. The particulars of claim, signed one day after the amended claim form was filed, unequivocally assert that the Defendants *are* in breach of fiduciary and tortious duties by failing to provide access and control to TTL and take steps to ensure that effect is not given to the alleged fraud. That is the case that the Defendants reasonably considered that they were required to address. *Chandra v Brooke North* [2013]

EWCA Civ 1559 makes it clear, albeit in the context of limitation periods, that particulars of claim define the scope of a claim against a defendant, and not the claim form which may be expressed in broader terms (see paragraph [92] in particular).

118. *NML* is authority for the proposition that a claimant may be permitted to rely on a jurisdictional gateway that was not relied on at the permission stage (see also *Alliance Bank JSC v Aquanta Corp* [2012] EWCA Civ 1588; [2013] 1 All ER (Comm) 819 (“*Aquanta*”) at [75]), and also that, in principle, there is no objection to amending a pleading served out of the jurisdiction unless the effect would be to add a claim in respect of which leave could not or would not have been given. What *NML* does not do is give an automatic green light to a new case being put forward in respect of which permission has not been obtained. This is evident in particular from Lord Phillips’ judgment at [75] and Lord Collins’ judgment at [137].

119. In *Aquanta* Tomlinson LJ said this at [47]:

“It is however trite that permission to serve outside the jurisdiction only extends to those causes of action which the applicant for permission has identified in its application as satisfying the relevant criteria prescribed under CPR 6.37 and paragraph 3.1 of PD 6B – see *Metall und Rohstoff AG v Donaldson Lufkin and Jenrette Inc* [1990] 1 QB 391 at page 436 per Slade LJ. This principle is unaffected by the Supreme Court having indicated in *NML Capital Limited v Republic of Argentina* [2011] 3 WLR 273 that the rule in *Parker v Schuller* (1901) 17 TLR 299 should no longer be followed. It is one thing to “set up another distinct cause of action which was not before the judge upon the original application”, which may now be allowed. However in order so to do the applicant needs the indulgence of the court. The permission to serve out of the jurisdiction is limited to causes of action for which it was sought unless and until extended.”

120. Where pleadings are sought to be amended, the Court of Appeal made it clear in *Magdeev v Tsvetkov* [2019] EWCA Civ 1802 at [26]-[27] that a formal application to amend is required. For good reason, Practice Direction 17 requires any such application to be accompanied by a copy of the statement of case with the proposed amendments. No application has been made in this case, whether formal or informal, to amend the particulars of claim. I disagree with Mr Wardell that *NML* shows that that is not required. In that case there was no change in the case in terms of the causes of action, and also no suggestion that any amendment to pleadings would not require the proper processes to be gone through.

121. The possibility of relief on a *quia timet* basis was not raised before oral submissions were made, so the Defendants were able to address it only in reply. The principles were helpfully summarised by Marcus Smith J in *Vastint Leeds v Persons Unknown* [2019] 4 WLR 2 at [31]. In particular, he said this at [31(3)]:

“When considering whether to grant a *quia timet* injunction, the court follows a two-stage test: (a) First, is there a strong probability that, unless restrained by injunction, the defendant will act in breach of the

claimant's rights? (b) Secondly, if the defendant did an act in contravention of the claimant's rights, would the harm resulting be so grave and irreparable that, notwithstanding the grant of an immediate interlocutory injunction (at the time of actual infringement of the claimant's rights) to restrain further occurrence of the acts complained of, a remedy of damages would be inadequate?"

122. He went on at [31(4) and (5)] to consider relevant factors. At the first stage these include whether, where the breach is entirely anticipatory, there are other steps the claimant could take and the time-frame between the application for relief and the threatened infringement, noting that the courts had often used the language of imminence. The second stage requires consideration of the effectiveness of a remedy granted only after infringement, taking account among other things of the gravity of the anticipated harm. (I should also note that although the first stage is framed in negative terms, the judge's comments covered mandatory as well as prohibitory injunctions, subject to the normal caveat that it is harder to persuade the court to grant the former.)
123. I agree with the Defendants that this is quite a long way from the sort of case where *quia timet* relief has been granted. A notable feature of this case is that TTL has sought no relief against the alleged hackers. There are precedents for obtaining interim injunctive relief, combined with orders for disclosure, where digital assets have allegedly been lost. No such relief has been sought either in respect of the bitcoin allegedly taken from the Electrum wallet (see [29] above), or to seek to prevent transfer of bitcoin from the 1Feex and 12ib7 addresses. Interim relief has also not been sought against the Defendants. TTL's actions are not obviously consistent with a material concern about imminent harm. It is not the case that TTL considers that there is no risk that the bitcoin will be moved. Dr Wright's suggested explanations for that not having occurred were that the hackers had not yet navigated the algorithmic masking that he had put in place, that they may not yet have realised what they have got, or that they were simply waiting for attention to die down.
124. Nevertheless, and assuming for the moment that the case had been pleaded to reflect the point, I would not have regarded this factor as being a sufficient basis by itself to justify setting aside the permission to serve out. The value of the bitcoin in the 1Feex and 12ib7 addresses, and the difficulties that would be likely to be encountered in recovering it if it were transferred or dissipated, indicates that the gravity of harm could be very significant. Further, following a trial at which TTL was successful it would obviously have established both its ownership of the assets and a breach of duty, so whilst damage might remain to be established, breach would not be entirely anticipatory.
125. However, the pleading point is not a technicality. Whilst permission to amend might have been granted if a proper application had been made, subject to appropriate provision for costs, no such application has been made. Without it TTL is not entitled to pursue an amended case, being a case which the Defendants had not previously understood was the case that they were required to address.

Payment for work

126. A further point raised on behalf of TTL in evidence, but not part of its pleaded case, was that it was prepared to pay the Defendants “reasonable compensation” for developing and implementing the required software changes to enable it to regain control of the assets.
127. I do not see that this assists TTL, and Mr Wardell did not rely on it in oral submissions much beyond suggesting that TTL’s offer to pay should not be held against it.
128. In reality, TTL’s offer to pay underlines the weakness of its case. It does not fit with a claim that the Defendants are currently in breach of duty, or that they will be if they do not contest TTL’s claim to ownership.

The significance of policy considerations

129. Mr Wardell stressed that many of the issues raised by this case relate to important points of public policy, and that should weigh against any summary determination. He relied on Lord Briggs’ statement in *Vedanta* at [48] (see [44] above). He also relied on the judgment of Coulson LJ in *Begum v Maran (UK) Ltd* [2021] EWCA Civ 326; [2021] 2 Lloyd’s Rep 505 (“*Begum*”), regarding an extension of a duty of care owed to third parties, where he said this at [71]:

“As I have endeavoured to show, claims based on a duty of care, in circumstances where the damage has been caused by a third party, are currently at the forefront of the development of the law of negligence. The alleged duty in this case could certainly be regarded as being on the edge of that development. But in such circumstances, I agree with the judge that, following the principle in *Barrett* and *Vedanta*, it would be inappropriate to strike out the claim based on the alleged duty of care on assumptions, in the absence of any findings of fact.”

This conclusion was reached despite real doubts that a duty of care would be found to exist (paragraphs [49] and [50]).

130. The reference that Coulson LJ made to *Barrett* is to *Barrett v Enfield DC* [2001] 2 AC 550. Coulson LJ had set out the relevant passage from that case earlier in his judgment at [23], where he said this:

“Decisions as to novel points of law should be based on actual findings of fact: see *Farah v British Airways* (The Times 26 January 2000, CA). In that case, the Court of Appeal referred back to the decision of the House of Lords in *Barrett v Enfield DC* [2001] 2 AC 550 where Lord Browne-Wilkinson said at 557e-g:

“In my speech in the *Bedfordshire* case [1995] 2 AC 633, 740-741 with which the other members of House agreed, I pointed out that unless it was possible to give a certain answer to the question whether the plaintiff’s claim would succeed, the case was inappropriate for striking out. I further said that in an area of the

law which was uncertain and developing (such as the circumstances in which a person can be held liable in negligence for the exercise of a statutory duty or power) it is not normally appropriate to strike out. In my judgment it is of great importance that such developments should be on the basis of actual facts found at trial not on hypothetical facts assumed (possibly wrongly) to be true for the purposes of the strike out.””

131. I observe that *Barrett* and *Farah v British Airways* both concerned applications to strike out, and that *Begum* concerned a claim for striking out or reverse summary judgment. Unlike *Altimio* and *Vedanta*, none of them addresses service out of the jurisdiction.
132. The policy considerations relied on by TTL included:
 - a) The absence of a rationale for a person to be denied access to assets known to be owned by him, with the result that the assets would effectively be lost and, if available at all, would most likely be available to fraudsters. There was an analogy with denying a person access to their life savings because they were locked in a safe to which a key or entry code had been lost.
 - b) The particular feature that (on TTL’s case) the Defendants were alone able to remedy the situation. There was no alternative locksmith or, to use a different analogy, no prospect of an (alternative) Good Samaritan.
 - c) Public policy required that an asset that is widely held, as bitcoin now is, should not be amenable to manipulation by fraudsters, beyond the reach of the law, and the standard of accountability that should be applied to those in control of the systems should reflect the significance of the services provided.
133. I of course accept that important issues are raised about the recourse that bitcoin owners have if private keys are lost. However, the fact that issues of policy are raised cannot provide a foundation for the existence of a duty for which I cannot see a realistically arguable basis under existing law, even assuming that the (heavily disputed) facts were all decided in TTL’s favour. In particular, it cannot be the case that the fact that the matters raised are controversial or difficult is sufficient of itself to justify the grant of permission if it is apparent that there is no serious issue to be tried under existing law. Whilst the test of real prospect of success is not a high one, it does exist to ensure that foreign litigants are not subject to proceedings which the defendant would be entitled to have summarily dismissed (*Carvill America Inc v Camperdown UK Ltd* [2005] EWCA Civ 645 at [24], per Clarke LJ). To adapt what Coulson LJ said in *Begum*, a case that is clearly beyond the edge of the development of the law does not meet the threshold.
134. The guidance provided by *Altimio* and *Vedanta* underlines the need for caution in cases where jurisdiction is in issue. As already indicated, it is not entirely clear that in *Altimio* Lord Collins was intending to draw a distinction between serious issue to be tried and the gateways when stating that a point of law should be decided unless it is exceptionally difficult or doubtful, although in that case the

merits were directly relevant to jurisdiction (see [43] above). But in any event, and irrespective of whether or not a legal issue can properly be decided, the threshold test on the merits remains that of serious issue to be tried, as Simon LJ explained in *Vedanta* (see [45] above). It is not lower than that, and in particular it does not permit service out in cases which do not meet the threshold test, however important or novel the issues raised. In my view this case does not meet that test.

135. Finally on the question of policy considerations, I note that the Law Commission are currently undertaking a project on digital assets. Their interim update, published on 24 November 2021, indicates that the scope of the project has been expanded and that the principal areas to consider include both competing claims in relation to digital assets and how legal remedies or actions can protect digital assets (paragraph 1.21). Whether the law should be developed in a way that would address all or part of TTL's case is no doubt something that could be considered by the Law Commission and, if appropriate, by Parliament.

Effectiveness of any remedy

136. As already indicated, TTL's position (as clarified in oral submissions) was that it accepted that the declaration of ownership that it sought would operate only *in personam*. Nevertheless, given the control it says that the Defendants have over the Networks and the commercial interests of miners to implement software updates, action taken by the Defendants to put in place the software patch that TTL requires would be effective. Mr Wardell further submitted that anyone else who took deliberate action to frustrate the purpose of the injunction could be liable in contempt on the basis that they had interfered with the due administration of justice. He relied on *Attorney General v Punch Ltd* [2003] 1 AC 1046.
137. I would observe that there is a significant difference between the facts considered in that case (publication of an article authored by a person the subject of an interim injunction against publication) and this case. It seems to me very unlikely that a court would determine that actions by other developers, who are not parties to these proceedings and not acting together with those that are parties, could realistically be treated as giving rise to liability for contempt. However, it is not necessary to decide the point, the practical significance of which may also depend on whether TTL is correct in its disputed claim that the Defendants, and not other persons, are the controllers of the Networks, such that any action by other developers might be limited to the creation of one or more additional networks following a "fork" (see also [34] and [35] above).

THE JURISDICTIONAL GATEWAYS: GOOD ARGUABLE CASE

138. Given my conclusions on the merits it is not strictly necessary to address whether TTL's claim falls within one or more of the gateways, but I will do so relatively briefly given the possibility of an appeal. It is most convenient to consider gateway 11 first.

Gateway 11: property within the jurisdiction

139. This gateway applies where the subject matter of the claim “relates wholly or principally to property within the jurisdiction”. Lightman J described it as follows in *In Re Banco Nacional de Cuba* [2001] 1 WLR 2039 at [33]:

“In my view on its proper construction the rule cannot be construed as confined to claims relating to the ownership or possession of property. It extends to any claim for relief, whether for damages or otherwise, so long as it is related to property located within the jurisdiction.”

140. TTL maintains that the bitcoin held at the 1Feex and 12ib7 addresses constitute property, that the claim relates to that property and that it is located in the jurisdiction. It did not seek to rely on the private keys themselves constituting property.
141. The Defendants did not take issue in oral submissions with the classification of the bitcoin as property, or that the claim relates to property. Given the Taskforce Statement and the views expressed in cases that have considered the issue (*AA v Persons Unknown* [2019] EWHC 3556 (Comm); [2020] 4 WLR 35 at [61]; *Ion Science Limited & Anor v Persons Unknown* (unreported), 21 December 2020 (“*Ion Science*”) at [11]; *Fetch.AI Limited v Persons Unknown* [2021] EWHC 2254 (Comm) (“*Fetch.AI*”) at [9] – albeit all in connection with interim relief) I am satisfied that TTL has the better of the arguments on these points.
142. However, the Defendants do challenge TTL’s claim that the bitcoin should be regarded as located in the jurisdiction. TTL’s claim to that effect, although not well developed at the stage of the application to serve out, is based on it being resident in the jurisdiction. Its position is that, rather than being located in its country of domicile, which is its place of incorporation (see *Dicey, Morris & Collins on the Conflict of Laws*, 15th ed. Rule 173(1)), its place of residence is the key determining factor, being the place where its central management and control is exercised (Rule 173(2)). The Defendants maintain that domicile is the correct test, and therefore that the assets should be regarded as located in the Seychelles.
143. In *Ion Science* Butcher J concluded at [13] that there was at least a serious issue to be tried that “the lex situs of a cryptoasset is the place where the person or company who owns it is domiciled”. He said that this was supported by Professor Andrew Dickinson’s book *Cryptocurrencies in Public and Private Law*, 2019 at paragraph 5.108. Butcher J’s comment was adopted by HHJ Pelling QC (sitting as a High Court judge) in *Fetch.AI* at [14]. Mr Ramsden submitted that I should follow the same approach as adopted in those two cases and determine that domicile is the correct test. (He also relied on *Eurasia Sports Ltd v Tsai* [2018] EWCA Civ 1742; [2018] 1 WLR 6089 at [21]-[25] in support of the same argument, but that is more relevant to the location of loss or damage: see below.)
144. However, the discussion in Professor Dickinson’s book does not in fact refer to domicile. It is part of a section that considers the proprietary character of cryptocurrencies. At paragraph 5.107 there is an interesting observation describing the value of cryptocurrencies as being reliant on a legitimate

expectation that the consensus rules underpinning the system will not be altered fundamentally to deprive participants of their association with particular units and the power to deal with them. He suggests that although this is a factual and not legal benefit it could be characterised as a species of intangible property, in the same way as goodwill. Paragraph 5.108 continues the goodwill analogy and refers to the *lex situs* rule for that, which is where the business is situated (see *IRC v Muller & Co's Margarine Ltd* [1901] AC 217, 235).

145. Paragraph 5.109 continues as follows:

“5.109 That analogy with goodwill supports the submission that the benefits accruing to a person who is a participant in a cryptocurrency system such as Bitcoin or Ripple (i) are a species of intangible property in the English conflict of laws, which (ii) arises from the participation of an individual or entity in the cryptocurrency system, and (iii) is appropriately governed by the law of the place of residence or business of the participant with which that participation is most closely connected. Rather than deciding a fictional *situs*, the choice of law rule can be more straightforwardly, and appropriately, expressed in the terms that the proprietary effects outside the cryptocurrency system of a transaction relating to cryptocurrency shall in general be governed by the law of the country where the participant resides or carries on business at the relevant time or, if the participant resides or carries on business in more than one place at that time, by the law of the place of residence or business of the participant with which the participation that is the object of the transaction is most closely connected.”

This passage obviously refers to place of residence or business, not domicile.

146. Paragraph 5.109 was also set out by HHJ Pelling in *Fetch.AI* at [14], and he went on to apply what it says to the facts in that case.
147. I would observe, with respect, that the distinction between domicile and residence or place of business appears not to have been material in *Ion Science*, a case in which Butcher J was also considering the position of both an individual and a corporate claimant. I further note that Butcher J referred at [21] to “the argument which I have already identified which is that the bitcoin are or were here and that the *lex situs* is where the owner resides or is domiciled”. In other words, Butcher J himself referred to residence in the same judgment, strongly indicating that he was not intending to say that domicile was the sole relevant test. He also did so in the context of a finding of good arguable case. My attention was not drawn to paragraph [21] of Butcher J’s judgment at the hearing.
148. If necessary to my decision I would conclude that TTL has the better of the arguments on this point. I should add that in reaching that conclusion I have also taken into account the discussion in the Taskforce Statement, and in particular the suggestion at paragraph 99 that the location of control of a digital asset, including by the storage of a private key, may be relevant to determining whether the proprietary aspects of dealings in digital assets are governed by English law.

149. However, if residence or place of business were the correct test the question would remain as to whether TTL is and was at material times resident within the jurisdiction (or had a sufficient place of business) as a matter of fact, such as to be able to maintain that its digital assets are situated here. A company is resident where its central management and control is located, that being where its “real business” is carried on. That is not a straightforward test to apply in this case. TTL has no active business. Its sole function appears to be to act as a vehicle to hold digital assets. I saw no evidence that it holds any digital assets apart from those the subject of the dispute. On TTL’s case those assets were acquired before Dr Wright based himself in this jurisdiction. From that point on there is no indication that TTL took any material action until it decided to bring this claim.
150. TTL’s case relies on the fact that Dr Wright had power to access and control its assets from his home office in Surrey, and that he or his wife were TTL’s CEO and controlled TTL via those means. I note in passing that they appear not to have been directly appointed as directors. Rather, the particulars of claim indicate the existence of a corporate director.
151. More significantly, however, Dr Wright’s own evidence is that he had not accessed the bitcoin for many years before the hack. Leaving to one side any administrative steps (which have not included filing any accounts or tax returns), TTL’s only real “action” was therefore the inaction of not choosing to deal in the assets. It is not clear to what extent, if at all, there was any conscious decision-making to that effect. The claim to be resident here therefore appears largely to depend on management and control having been manifested by the fact that Dr Wright and/or his wife did not deal with the assets, but had the ability to do so.
152. TTL also relies on the lack of any activity in the Seychelles (which neither Dr Wright nor his wife have ever visited) and its registration under the International Business Companies Act 2016, which TTL maintains is intended for companies not carrying on business there. Although there is a registered agent in the Seychelles which maintains the register of members, other books and records are said to be kept at Dr Wright’s home office, where day to day management and administration is conducted. However, there is no indication that TTL has filed any tax returns or has registered a place of business⁴ here.
153. TTL further relies on a decision in these proceedings by Master Clark that TTL should provide security for costs ([2022] EWHC 2 (Ch)), which included a finding at [43] that TTL was resident in England. Indeed, Mr Wardell’s primary case on residence was a submission that this finding amounted to an issue estoppel.
154. An issue estoppel arises:

“... where a particular issue forming a necessary ingredient in the cause of action has been litigated and decided and in subsequent proceedings between the same parties involving a different cause of

⁴ Strictly, a UK establishment: Overseas Companies Regulations, SI 2009/1801.

action in which the same issue is relevant one of the parties seeks to re-open that issue.”

(*Arnold v National Westminster Bank plc* [1991] 2 AC 93, at 105D, per Lord Keith.)

155. I am not satisfied that there is an issue estoppel in this case. It is clear from paragraph [25] of Master Clark’s judgment that the finding was unnecessary to the decision, and in my view it is unlikely on that basis to have the necessary element of finality (see Lord Reid’s judgment in *Carl Zeiss Stiftung v Rayner & Keeler Ltd (No. 2)* [1967] 1 AC 853 at 918C, in the context of foreign judgments, where he excluded collateral or obiter decisions). Further, whilst I accept the principle that an issue estoppel may arise in respect of an earlier determination of an issue made in an interlocutory decision in the same proceedings (*Desert Sun Loan Corp v Hill* [1996] 2 All ER 847, referred to in *JSC BTA Bank v Skurikhin* [2019] EWHC 1407 (Comm) at [66]), I am not persuaded that that principle should necessarily be applied to the facts in this case.
156. In particular, I have concerns about a finding in respect of a highly fact sensitive, and contentious, issue such as residence being treated as giving rise to an issue estoppel at a preliminary stage where a further investigation could lead to a different conclusion. Mr Wardell accepted that he would have difficulty with his submission if the matter decided at the interlocutory hearing was also a matter for trial. That must be right, but it is by no means obvious why that difficulty should not also apply if the same issue is relevant at a different interlocutory hearing, at least if for a different purpose. Issue estoppel is not absolute and will not apply in special circumstances that would cause injustice: *Virgin Atlantic Airways Ltd v Zodiac Seats UK Ltd* [2014] AC 160 at [22], citing *Arnold v National Westminster Bank plc*.
157. However, it is unnecessary to determine this point. Overall, on the basis of the available evidence I would be prepared to conclude that TTL has the better of the arguments on residence. Based on the pleaded case, Dr Wright did in fact have the ability to deal in the assets from this jurisdiction, and determining not to do so (whatever level of activity that involved) can be described as an exercise of control. The only alternative to England that has been put forward appears to be the Seychelles, and it is hard to see that TTL is resident in a place where its directing minds have never visited, it keeps no books and records, and where it appears not even to have filed accounts. This was also Master Clark’s (obiter) conclusion, on a balance of probabilities, following a hearing at which the Defendants actively maintained that TTL was resident in the Seychelles.
158. I therefore consider that there is sufficient to amount to a good arguable case that (a) TTL is resident in the jurisdiction; and (b) that the property is located here.

Gateway 9(a): tort – damage within the jurisdiction

159. Mr Wardell’s starting point for the application of gateway 9(a) was the *lex situs* of the assets, which TTL says is in England: see above. He submitted that *Ion Sciences* and *Fetch.AI* also supported TTL’s case that damage has been sustained, or will be sustained, in the jurisdiction. Although the bitcoin remained at the

1Feex and 12ib7 addresses it was effectively worthless without the ability to control it, and furthermore it was likely to be lost once the hackers managed to effect a transfer of it. Although it dealt with personal injury rather than economic loss, *FS Cairo (Nile Plaza) v Brownlie* [2021] UKSC 45; [2021] 3 WLR 1011 (“*Brownlie 2*”) was supportive. It was from England that TTL (through Dr Wright) could not control or deal with the assets, and once the Defendants refused (or refuse) to take action then damage was (or would be) suffered there.

160. The Defendants submitted, as with gateway 11, that if there was any damage then it would be suffered in the Seychelles. In particular, Mr Ramsden submitted that the Defendants’ case is supported by the references to domicile in *Eurasia Sports Ltd v Tsai* [2018] EWCA Civ 1742; [2018] 1 WLR 6089 (“*Eurasia*”) at [21]-[25]. Further, *Brownlie 2* was a personal injury case, and in that case Lord Lloyd-Jones drew a clear distinction between cases involving physical damage and those concerned with pure economic loss (see in particular paragraphs [75] and [76] of his judgment in *Brownlie 2*).
161. I do not consider that the passage relied on in *Eurasia* assists the Defendants. Floyd LJ made the point at [21] that the place where damage is sustained is not simply the place where financial loss is suffered, but rather “where the event giving rise to the damage directly produces its harmful effects on the person who is the victim of the act”. At [23] he referred to Christopher Clarke J’s comments in *Dolphin Maritime & Aviation Services v Sveriges Anfartygs Assurans Forening* [2009] EWHC 716 (Comm); [2009] 2 Lloyd’s Rep 123 about the danger of conflating the place where the damage occurred and the place where the loss was suffered, and suggesting that loss may have been suffered in the place of domicile. Floyd LJ went on to say this at [25]:

“Christopher Clarke J’s reference in *Dolphin* to the place of domicile of the claimant reflects the need to scrutinise carefully the suggestion that loss occurred there. It is well established that the fact that a corporation’s loss is felt where its books are made up does not mean that that is the place where the damage occurred. If that were so a corporation would in most economic loss cases be able to sue in the courts of its own domicile, where it is likely to hold its bank account. As *Dolphin* shows, however, it by no means follows that a proper application of the gateway cannot yield the result that the damage occurred where the claimant’s bank account is located, even if it is also its place of domicile.”

162. As I understood Mr Ramsden’s submissions, because TTL has no active business and no bank account the only relevant question is where it books its losses, and that must be the Seychelles because its books are made up there, or that was where it was required to report its corporate activity.
163. There are a number of difficulties with this. First, it does not really engage with TTL’s case that its loss of control of the assets (or more accurately the failure to restore control) would be directly felt in England, being the location from which control would be exercised if it was available. Secondly, it effectively assumes that the absence of a bank account and place of (active) business results in damage being treated as occurring in the same location as loss is treated as suffered. That

is not what *Eurasia* says. Thirdly, it assumes that TTL does or at least is required to make up its books and/or file accounts in the Seychelles. But Dr Wright's evidence is that accounting records are (permissibly) kept in England and that TTL has not in fact filed accounts in any location. Finally, I note that in *Brownlie* 2 Lord Lloyd-Jones expressed a note of caution about *Eurasia* and related cases as incorrectly proceeding on the assumption that the domestic tort gateway should be interpreted in line with the special rule of tort jurisdiction under the Brussels system, as well as about those cases dealing with economic loss rather than physical damage ([74] and [75]).

164. As with gateway 11, in my view TTL has the better of the arguments on the basis of residence in the jurisdiction and any failure to regain control of the assets being directly experienced in England, and not in the Seychelles. I do not accept Mr Thorne's submissions that the assets could be accessed from anywhere, and that TTL's arguments amounted to saying that because TTL's agent happened currently to be located in England then damage was sustained here. Rather, its case on this point is founded on this being the jurisdiction from which TTL could have, and would, exercise control of its assets, and that that is the basis on which damage would be directly felt in England. In reality, based on the available evidence, it is hard to see that it could be said to sustain damage anywhere else.

Fiduciary duty claim and gateway 4A

165. There is no jurisdictional gateway specifically designed for alleged breaches of fiduciary duty. TTL relied on the decision of Marcus Smith J in *Twin Benefits v Barker* [2017] EWHC 1412 (Ch) as support for the proposition that a claim for breach of fiduciary duty may be regarded as in substance tortious, and therefore falling within gateway 9(a) (*Twin Benefits v Barker* at [112]-[113], citing among other cases *Henderson v Merrett Syndicates Limited* at p.205, per Lord Browne-Wilkinson). I agree that on the facts of this case, and bearing in mind that both the tort and fiduciary duty claims rest on a form of voluntary assumption of duty which it is alleged has not been (or will not be) performed, there is a good arguable case that gateway 9(a) applies to the latter as well as to the former. In any event there is a good arguable case that the claim for breach of fiduciary duty falls within gateway 11. Gateway 4A would also be engaged if the tortious claim fell within gateway 9(a) or 11.

FORUM

166. On the basis of the conclusions already reached on the merits it is not necessary to express a view as to whether England is the proper forum, but given the possibility of an appeal I will make some brief comments.
167. In summary, if there had been a serious issue to be tried I would have been satisfied that England is the appropriate forum for the trial of the dispute, and that the court ought to exercise its discretion to permit service of the proceedings out of the jurisdiction. The primary connecting factors are TTL's presence in the jurisdiction, and that of its agent and primary witness Dr Wright. That presence is not ephemeral. Dr Wright has lived in the jurisdiction since 2015 and on his evidence intends to apply for citizenship. As discussed, TTL also has the better

of the arguments that the digital assets are located in this jurisdiction and that damage has been or will be sustained here. It is also seeking to bring a claim under English law. TTL's documents should generally be located here. There is no other clear place where the "factual focus" will be. The Seychelles is clearly not appropriate.

168. In contrast, the Defendants are based in a number of different jurisdictions. Whilst half are in the United States, they are not all in the same US State. Other Defendants are based in different jurisdictions that include the Netherlands, Switzerland, France, Japan, New Zealand and Australia. There is no other jurisdiction with which I can see a closer link than England, or which strikes me as even arguably the proper forum. There is no language difficulty since all the Defendants appear to be fluent English speakers, and relevant documents appear likely all to be in English.

FULL AND FRANK DISCLOSURE

169. I should also deal very briefly with the Defendants' contention that there were breaches of the duty of full and frank disclosure when TTL obtained permission to serve out. These were not pursued on oral submissions but were raised in Mr Ramsden's written submissions.
170. In summary, I am satisfied that there was no material non-disclosure. The allegations of non-disclosure were wide-ranging, and subject to complaint from TTL that they did not meet the requirement for clarity emphasised by Males J in *National Bank Trust v Yurov* [2016] EWHC 1913 (Comm) ("*Yurov*") at [19], but to pick up some of them:
- a) There was a complaint that TTL did not disclose Dr Wright's connection with the Bitcoin Association (the First Defendant). Since the existence of that defendant was not relied on to found jurisdiction the relevance of this is hard to see, but in fact Dr Wright's promotion of the BSV Network was disclosed.
 - b) There were also complaints that TTL had chosen not to sue the (many other) contributors to the software, and that some Defendants are not active contributors. Fundamentally it is up to TTL whom it sues, but in any event its case is based on the Defendants' alleged control of the Networks, and in particular their alleged control over what software changes are implemented. Its specific allegations of the roles played by each Defendant were set out.
 - c) The fact that Dr Wright's claim to be Satoshi Nakamoto is disputed was also disclosed (although its true relevance to the issues in the case is highly debatable). More generally and relevantly, potential issues with Dr Wright's credibility were disclosed, including adverse judicial comments.
 - d) Although the issues in respect of Gateways 9(a) and 11 relating to domicile and residence were not addressed as fully as they have been before me, I consider that they were sufficiently raised.

- e) A complaint was made in Mr Ramsden's written submissions that although an academic paper said to provide support for the existence of fiduciary obligations was referred to, the paper did not provide the support claimed and alternative views were not disclosed. This complaint was made late. It should have been included in the application or evidence supporting it: *Yurov* at [14] and also *Public Institution for Social Security v Kamran Amouzegar* [2020] EWHC 1220 (Comm) at [142], [143] and [149]. But in any event I do not consider it realistic that an *ex parte* application to serve out should air all sides of an academic debate, in circumstances where the paper in question was not relied on as the central plank of TTL's case on fiduciary duties.

CONCLUSION

171. In conclusion, TTL has not established a serious issue to be tried on the merits of the claim. In those circumstances the appropriate order is to set aside the order of Deputy Master Nurse granting permission to serve the claim form out of the jurisdiction, and to set aside service of the claim form.